

CLAIMS

1. A device for remote-controlling tool rotating comprising:
a hollow body (1) including at least two parts pivotally connected with their adjacent chamfered end surfaces (5, 5') – a proximal part (2) which is connected to a control handle and formed of two coaxial oriented hollow cylindrical elements (3, 4) designed to rotate with respect to each other - and a distal part (6), said hollow body (1) also including a link for transferring a working motion from the control handle to a tool at the distal end of the body, wherein said link for transferring a working motion is designed as a shaft (10) comprised of at least two sections – a driving section (11) and a driven section (13) which are connected in order to vary the angular position with respect to each other.

2. The device of claim 1, wherein the driving and the driven sections (11,13) of the shaft are connected by teeth (18, 19) coming into engagement and provided at the facing end surfaces of the shaft sections (11, 13).

3. The device of claim 1, wherein the driving and the driven sections (11, 13) of the shaft are connected by means of one of joints chosen from a group consisting of a cardan joint (27) and a joint having equal angular velocities.

4. The device of claim 1, wherein said shaft additionally comprises a third transmitting section (12) which is located between said driving and driven sections (11, 13) and connected to them in order to transfer a rotational motion from the driving section (11) to the driven one (13).

5. The device of claim 4, wherein the engagement of the driving and the driven sections (11, 13) with the transmitting section (12) is provided by means of bevel gears (14, 15 and 16, 17).

6. The device of claim 5, wherein each shaft section (11, 12, 13) is comprised of at least two coaxial oriented elements mounted to rotate independently of one another.

7. The device of claim 4, wherein the engagement of the driving and the driven sections (11, 13) with the transmitting section (12) is provided by means of cardan joints (27).

8. The device of claim 1, wherein an intermediate part (20) having the end surfaces (21, 21') chamfered in the opposite directions and mated to come into engagement each with the respective chamfered surface 5, 5' of the parts 2, 6 in order to rotate with respect to the proximal and distal parts of the body 1 is additionally provided

in between the proximal and the distal parts (2, 6) of the body (1), and contains the transmitting section which is formed of two parts (12, 12') connected kinematically and designed to transfer a rotational motion.

9. The device of claim 8, wherein said kinematic connection between the parts (12, 12') of the transmitting section is provided by means of one of the systems chosen from a group consisting of a hinge joint and a bevel gear.

10. The device of claim 1, wherein an intermediate part (28) having end surfaces chamfered and mated to come into engagement each with the respective chamfered surface of the parts (2, 6) in order to rotate with respect to them is provided between the proximal and the distal parts (2, 6) of the body 1 and contains a hollow cylindrical element (30) arranged inside it in coaxial alignment to the body 1 and intended to rotate in respect of the part, said cylindrical element (4) in the proximal part (2), the cylindrical element (30) in the intermediate part (28) and the distal part (6) being engaged in between by means of teeth provided on facing end surfaces thereof (29, 31 and 29', 31'), said transmitting shaft section (12) being connected with the driving and driven sections (11, 13) by means chosen from a group consisting of cardan joints (27) and gears.